compounds recited in the claims are linked by a common inventive concept, including a common structural feature that is directly related to their common utility. Second, several of the claims had already been allowed by the Patent and Trademark Office, making an assertion that examination imposes an undue burden on the Office untenable. Finally, this restriction requirement was improperly made after final action had already been taken on these claims. In addition, even if the requirement were properly made, these claims relate to nucleotide sequences and, in accordance with MPEP §1850, 10 such sequences should be examined together in a single application.

I. Each of the pending claims relates to a single inventive concept.

With regard to the first point, the restriction requirement is based on an erroneous assertion that the claims do not relate to a single inventive concept. Each of the compounds recited in Applicants' claims comprises a synthetic oligonucleotide comprising a 5mCpG dinucleotide, wherein the 5mC is a C-5 methylcytosine. As discussed in the specification, for example at page 12, lines 11-16, the invention is based on the discovery that synthetic oligonucleotides having the C-5 methylcytosine recognize and bind an allosteric site on DNA cytosine methyltransferase thereby modulating DCMTase activity. Because all of the recited oligonucleotides share both this structural feature and the modulatory activity conveyed by this structural feature, and because this ability to modulate DCMTase activity via an allosteric site was previously unknown and unexpected, unity of invention is present. Applicants further note that the relationship between this common structural feature and the modulatory activity of the oligonucleotides is extensively documented in the Examples portion of the specification.

At page 3 of the Office Action, it is asserted that the "special technical feature" of Group I is a 5mCpG dinucleotide, wherein 5mC is C-5 methylcytosine, and that this feature is shown by Volpe et al. (FEBS Letters, 1991, 329:233-237). First, Applicants respectfully point out that this characterization of the special technical feature is erroneous in that it excludes the term "synthetic oligonucleotide", a feature recited in each of the pending claims and a feature previously recited by Applicants as part of the technical features linking all of the claimed subject matter.

While Volpe does indeed discuss 5mCpG dinucleotides, it does so in the context of analyzing the nucleotide sequences of various housekeeping and tissue specific genes. Volpe does not teach or suggest synthetic oligonucleotides containing 5mCpG dinucleotides. Moreover, the teachings of Volpe do not anticipate nor render obvious any of Applicants' pending claims.

II. Examination of previously allowed claims cannot be burdensome.

Second, it cannot be asserted that it would impose an undue burden on the examiner in charge of this application if the instant restriction requirement were not advanced. Such an assertion would be in direct contradiction with the prosecution history of this application. Applicants note that, the first action in this application was a restriction requirement dated July 19, 2001, in which four groups of claims were identified. In response, examination of the application was restricted to Group I, limited to the oligonucleotides and omitting the various method claims, which are currently being pursued in a divisional application. The oligonucleotide claims, including claim 1, directed to a synthetic oligonucleotide comprising a C-5 methylcytosine and which recognizes and binds an allosteric site on DCMTase thereby modulating DCMTase activity associated with the allosteric site, were examined and rejected in an Office Action dated September 17, 2001. Applicants submitted an Amendment in response to this Office Action on February 15, 2002.

Again, the claims relating to the synthetic oligonucleotides comprising a C-5 methylcytosine and a 5mCpG dinucleotide were examined and a final Office Action was dated May 15, 2002. In this Office Action, claims 34, 41, 44, 45, 47 and 48 were found free of the prior art and ALLOWED. In addition, claims 31, 43 and 46 were merely objected to as being based upon a rejected base claim. On August 14, 2002, a telephonic interview was held between Examiner Wilson and Applicants' undersigned representative. During this interview a proposed Amendment was reviewed and discussed and Examiner Wilson stated that the amended claims looked good, subject to a more thorough review, but that any possible modifications required could be made by Examiner's Amendment. However, the next communication was an Advisory Action dated August 30, 2002, in which entry of the Amendment was refused and the rejections maintained because of some minor issues under 35 U.S.C. §112, second paragraph. Accordingly, Applicants submitted an additional Amendment on October 1, 2002, in which the previous unentered amendments were included as well as further amendments to place the claims clearly in condition for allowance.

Instead, however, Applicants next received a Communication dated October 28, 2002, which placed the October 1, 2002 Amendment in abeyance until sequence compliance was addressed. Applicants note that the PCT application of which the present application is a national stage filing included a complete Sequence Listing in paper and computer readable form when it was filed on June

12, 1998. To expedite the handling of this matter, Applicants arranged for hand-delivery of the paper and computer readable form of the Sequence Listing and accompanying Statement to the Patent and Trademark Office on November 7, 2002. Because of the expiration of the six month period for responding to the final Office Action dated May 15, 2002, Applicants additionally filed a request for a continuing prosecution application on November 15, 2002 to avoid abandonment of the application.

The current restriction requirement is raised after final action had already been taken in this case, and also after the claims had been examined and even found to be free of the prior art and allowable. It is simply incongruous to assert that already-examined claims are too burdensome to be examined together.

III. Restriction after final action is improper.

It is further improper to raise a restriction requirement after final action has already been taken in the case. Applicants note that the only reason a continuing prosecution application was filed was because the Patent and Trademark Office issued an unexpected requirement for re-submission of the Sequence Listing only six weeks prior to the expiration of the statutory term for responding to the final Office Action. Applicants made every effort possible to place the application in condition for allowance well in advance of the statutory deadline.

In addition, the continuing prosecution application properly requested entry of the previously unentered Amendment dated October 1, 2002. Any action taken by the Office at this time should address the merits of the currently pending claims, which are claims 31, 34, and 36-50.

Finally, even if the restriction requirement were proper at this stage of prosecution, at least 10 oligonucleotides should be examined together, in accordance with MPEP §1850. In addition, Applicants request the Examiner take into account that some of the sequences are generic to others or are subsumed within other sequences, reducing the burden on the examination process. See, for example, SEQ ID NO: 1-4.

Consequently, Applicants respectfully request the Examiner reconsider and withdraw the restriction requirement. It is also submitted that this application is now in good order for allowance and such allowance is respectfully solicited. Should the Examiner believe minor matters still remain that

can be resolved in a telephone interview, the Examiner is urged to call Applicants' undersigned attorney.

Respectfully submitted,

GATES & COOPER LLP
Attorneys for Applicant(s)

Howard Hughes Center
6701 Center Drive West, Suite 1050
Los Angeles, California 90045
(310) 641-8797

Date: August 28, 2003

By: _____
Name: Karen S. Canady
Reg. No.: 39,927

KSC/

G&C 30794.30-US-WO